



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,257	06/12/2001	Sachiko Yamamoto	70281/55,986	4822

7590

09/30/2002

Dike, Bronstein, Roberts & Cushman
Intellectual Property Practice Group
EDWARDS & ANGELL, LLP
PO BOX 9169
Boston, MA 02209

EXAMINER

FRONDA, CHRISTIAN L

ART UNIT

PAPER NUMBER

1652

DATE MAILED: 09/30/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/879,257

Applicant(s)
Yamamoto et al.

Examiner
Christian L. Fronda

Art Unit
1652



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1-46 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 1652

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-6, drawn to a hybrid enzyme which has a partial substitution or an insertion of a peptide containing a part of an amino acid sequence represented by SEQ ID NO: 1, classified in class 435, subclass 183.
 - II. Claims 7 and 8, drawn to a reagent for measurement of C-reactive protein comprising a hybrid enzyme which has a partial substitution or an insertion of a peptide containing a part of an amino acid sequence represented by SEQ ID NO: 1, classified in class 435, subclass 7.6.
 - III. Claims 9 and 10, drawn to a kit for measurement of C-reactive protein containing a reagent for measurement of C-reactive protein comprising a hybrid enzyme which has a partial substitution or an insertion of a peptide containing a part of an amino acid sequence represented by SEQ ID NO: 1, classified in class 435, subclass 810.
 - IV. Claims 11 and 12, drawn to a method for measurement of C-reactive protein which is characterized in using a hybrid enzyme which has a partial substitution or an insertion of a peptide containing a part of an amino acid sequence represented by SEQ ID NO: 1, classified in class 435, subclass 7.4.
 - V. Claim 13, drawn to a method for measurement of C-reactive protein comprising bringing a sample containing C-reactive protein, a hybrid enzyme which has a partial substitution or an insertion of a peptide containing a part of an amino acid sequence represented by SEQ ID NO: 1, and an anti-C-reactive protein antibody, classified in class 435, subclass 7.4.
 - VI. Claims 14-19, drawn to a hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6, classified in class 435, subclass 189.
 - VII. Claim 20, drawn to a reagent for measurement of a material containing a hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6, classified in class 435, subclass 7.6.
 - VIII. Claim 21, drawn to a kit for measurement of a material containing a peptide comprising a hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6, classified in class 435, subclass 810.
 - IX. Claim 22, drawn to a method for measurement of a material containing a peptide

Art Unit: 1652

- using a hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6, classified in class 435, subclass 7.4.
- X. Claim 23, drawn to a method for measurement of a material containing a peptide using a hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6 in combination with a material having binding ability to the peptide, classified in class 435, subclass 7.4.
- XI. Claim 24, drawn to a method for measurement of a material containing a peptide comprising bringing a hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6, a sample containing a material containing the peptide, and a material having binding ability to the peptide, classified in class 435, subclass 7.4.
- XII. Claim 25, drawn to a reagent for measurement of a material having binding ability to a peptide comprising a hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6 in combination with a material having binding ability to the peptide, classified in class 435, subclass 7.6.
- XIII. Claim 26, drawn to a kit comprising a hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6 in combination with a material having binding ability to the peptide, classified in class 435, subclass 810.
- XIV. Claim 27, drawn to a method for measurement of a material having binding ability to a peptide using a hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6, classified in class 435, subclass 7.4.
- XV. Claim 28, drawn to a method for measurement of a material having binding ability to a peptide comprising bringing a hybrid enzyme having a peptide introduced into a specific position of a glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6 into contact with a sample containing a material having binding ability to the peptide, classified in class 435, subclass 7.4.
- XVI. Claims 29-34, drawn to a gene coding for a hybrid enzyme comprising an amino acid sequence into which a foreign peptide is introduced by substitution or insertion of the amino acid sequence of glucose-6-phosphate dehydrogenase represented by SEQ ID NO: 6, a transformant, and method for producing a protein having glucose-6-phosphate dehydrogenase activity, classified in class 435, subclass 190.
- XVII. Claims 35 and 36, drawn to a hybrid enzyme in which a peptide selected from an

Art Unit: 1652

amino acid sequence represented by SEQ ID NO: 1 is introduced into a β -galactosidase, classified in class 435, subclass 200.

- XVIII. Claims 37-40, drawn to a gene coding for a hybrid enzyme in which a peptide selected from an amino acid sequence represented by SEQ ID NO: 1 is introduced into a β -galactosidase, transformant, and method for producing a protein having β -galactosidase activity, classified in class 435, subclass 69.1.
- XIX. Claims 41 and 42, drawn to hybrid enzyme in which a peptide selected from an amino acid sequence represented by SEQ ID NO: 1 is introduced into a specific position of an alkaline phosphatase by insertion or substitution, classified in class 435, subclass 196.
- XX. Claims 43-46, drawn to a gene coding for a hybrid enzyme in which a peptide selected from an amino acid sequence represented by SEQ ID NO: 1 is introduced into a specific position of an alkaline phosphatase by insertion or substitution, transformant, and method for producing a protein having alkaline phosphatase activity, classified in class 435, subclass 69.1.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions of Groups I-III, VI-VIII, XII, XIII, and XVI-XX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). The products of Groups I-III, VI-VIII, XII, XIII, and XVI-XX are each independent chemical entities and require different literature searches.

Inventions of Groups IV, V, IX, X, XI, XIV, and XV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). The methods of Groups IV, V, IX, X, XI, XIV, and XV are distinct both physically and functionally; require different process steps, reagents, and parameters; and produce different products.

Invention of Groups II, III, VI-VIII, XII, XIII, and XVI-XX are unrelated to the processes of Groups IX-XI, XIV, and XV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Each of the processes of Groups IX-XI, XIV, and XV do not require the product of Groups II, III, VI-VIII, XII, XIII, and XVI-XX.

Invention of Groups I-III, VII, VIII, XII, XIII, and XVI-XX are unrelated to the processes of Groups IV and V. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Each of the processes of

Art Unit: 1652

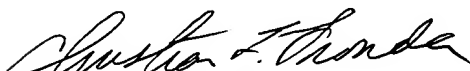
Groups IV and V do not require the products of Groups I-III, VII, VIII, XII, XIII, and XVI-XX.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

3. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian L. Fronda whose telephone number is (703)305-1252. The Examiner can be contacted Monday-Friday from 8:30AM - 5:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy, can be reached at (703)308-3804. Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1600 receptionist whose telephone number is (703)308-0196.



Christian L. Fronda
Patent Examiner
Technology Center 1600
Art Unit 1652